# Decision Support Briefing Southeast River Forecast Center



# **Hydrologic Vulnerability Assessment**



Issued: 12:06 PM ET Wednesday, June 16, 2021

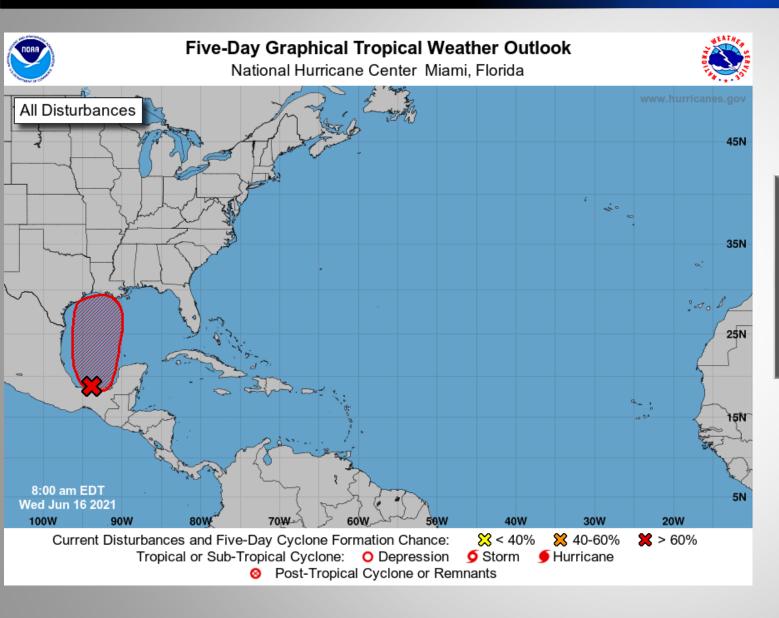






- Tropical activity will increase in the Gulf of Mexico as we approach this weekend.
- Rainfall associated with this tropical system will likely bring heavy rain to areas of the southeast U.S....but is not expected until this Saturday.
- The SERFC is currently using 48 hours of QPF (rainfall forecast) in the model
- A Water Resource Outlook will be issued tomorrow to help prepare for the weekend with regular briefings again on Friday and continuing through the weekend.

#### **Current Disturbances/Track Forecast**



Early tropical season activity shows a 90% chance of tropical development over the next 5 days. There is still uncertainty to timing and progression of any type of storm that would develop.

## 30-Day Departure From Normal Precipitation

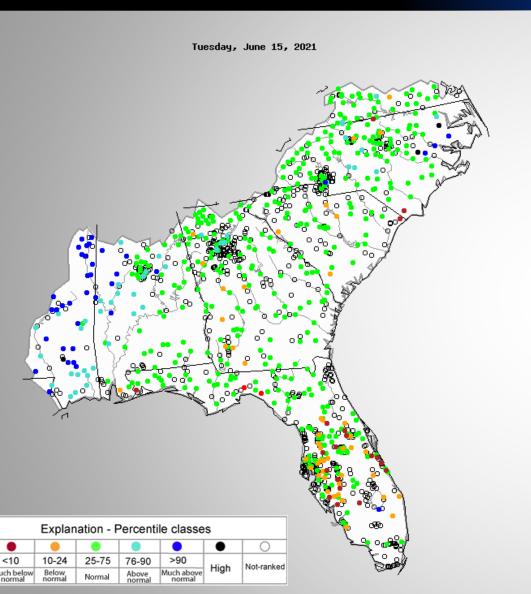




Rainfall over the last 30 days has been varied. Some areas of above normal and some below. In the likely to be most affected area around Mobile, Alabama, and along the Florida panhandle, there has been below normal rainfall. Areas in central and northern Alabama Mississippi have been very wet recently and will be more vulnerable to flooding.

The storms path and strength will play a big part in where the heavy rain will set up.

### USGS Daily Streamflow compared to normal

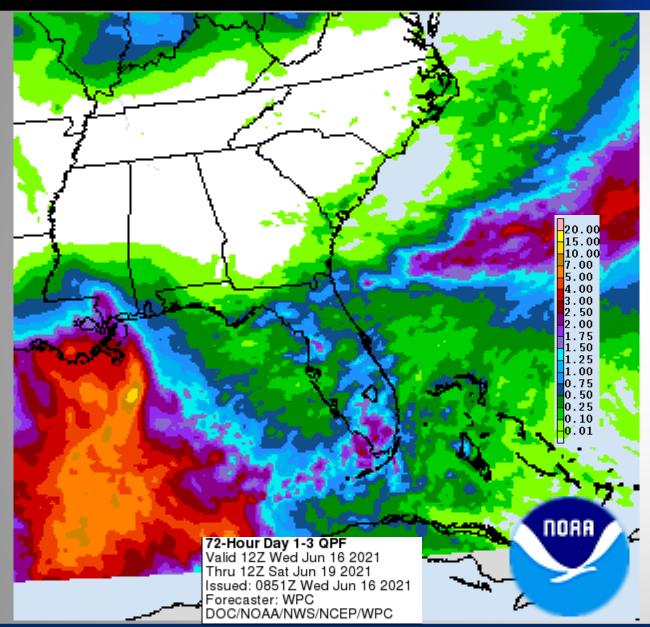


For the most part, streamflows are near normal across most of the southeast U.S. for the day.

The exceptions are in the Tombigbee basin in Alabama and Mississippi where there has been recent heavy rainfall.

**ZUSGS** 

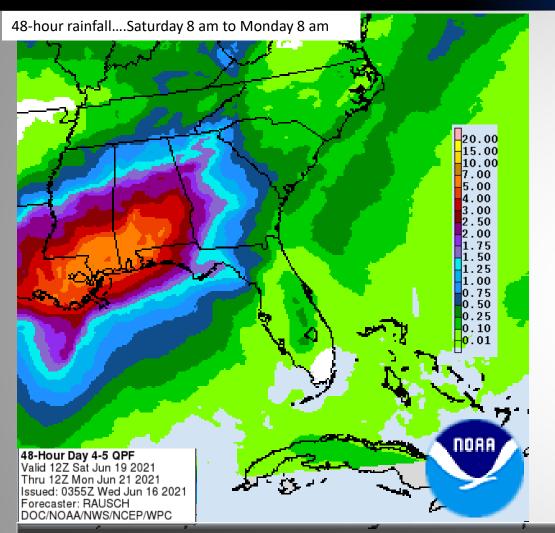


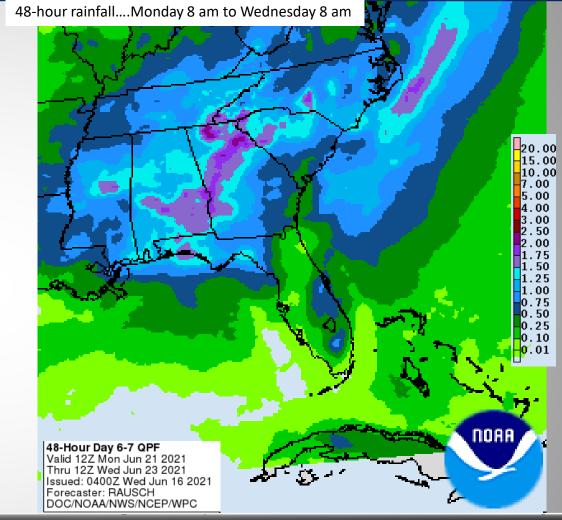


The rest of the week through Saturday morning looks mostly dry except for the Florida peninsula and right along the gulf coast of Florida and Alabama.

Totals of less than a quarter inch during that time are expected. The dry weather over the next 3 days will help rivers recede in northern Alabama and Mississippi.

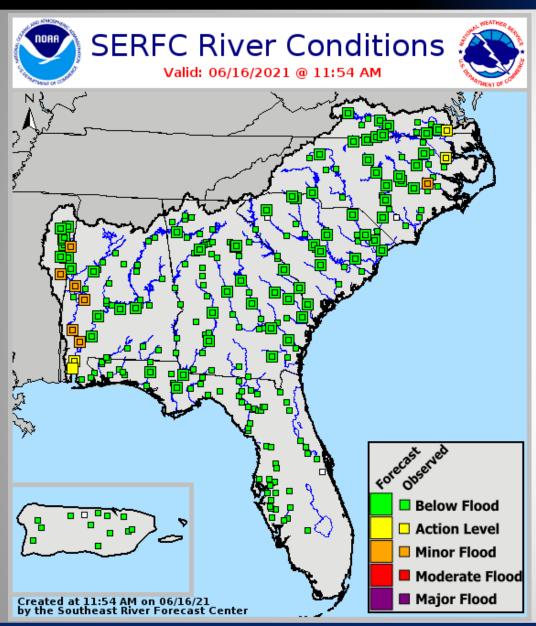
### Days 4 - 7 Precipitation Forecast





Heaviest rains are not expected in the southeast US until this weekend. On the left is the 48-hr rainfall forecast for Saturday through Monday morning. The right shows Monday through Wednesday. Still a lot of uncertainty this far out. Please continue to monitor changing forecasts.

#### SERFC Current conditions and forecast



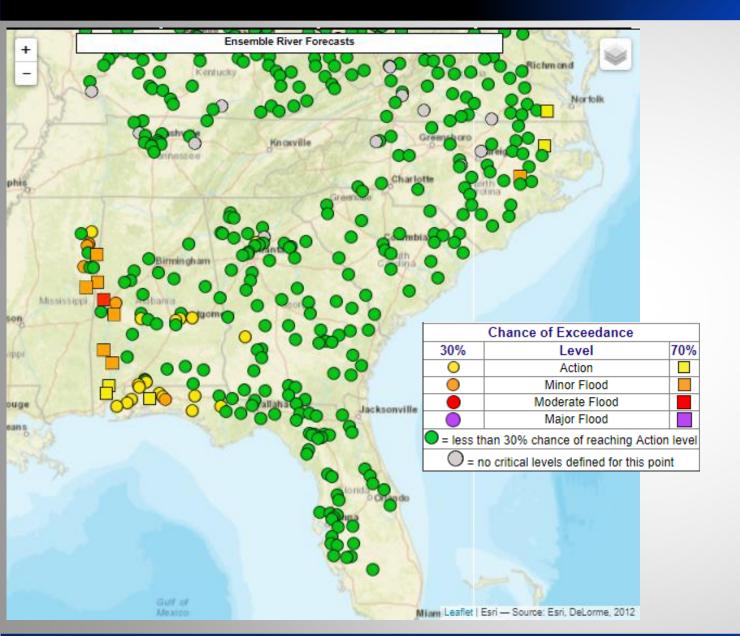
Numerous forecast points in the Tombigbee river basin remain above flood stage, but most are receding or very close to their crest from the recent rainfall.

Three days of dry weather will help to let the upper portions of the basin recede.

#### Meteorological Model Ensemble Forecast

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The Meteorological Model Ensemble Forecast System (MMEFS), to the left, is using the NAEFS model and addresses uncertainty in the longer lead rainfall forecast that helps to provide a confidence level for potential flooding. The NAEFS runs in our model every 12 hours.

There are numerous points in along the gulf coast in Alabama and the Florida panhandle that show action and some flood stage rises. There is a very wide spread to the model solutions with some very high values, and some that don't show very much rain. Stay tuned the rest of this week for more information.

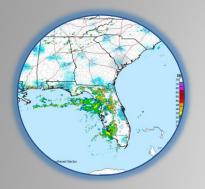
To take a closer look, here is the link to more detailed information:

- SERFC will remain in normal operations. Normal operating hours are from 6 am to 10 pm, 7 days a week. Please contact us if you have any questions or concerns.
- The Water Resources Outlook will be issued tomorrow and will address climate conditions, short and long term forecasts before we have another tropical focused briefing for Friday.

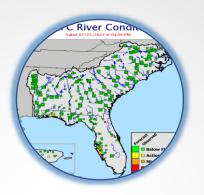
Latest River Stages and Forecasts are available...click here!

Please send all operational correspondence to <a href="mailto:sr-alr.rivers@noaa.gov">sr-alr.rivers@noaa.gov</a> or call the office directly.

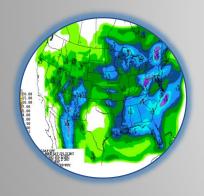




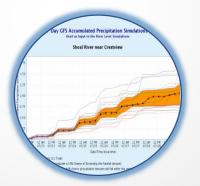
**Latest Radar** 



**SERFC Quick Brief** 



**Latest Forecast Rainfall** 



**MMEFS - Ensemble River Forecasts** 

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- This product has set the stage for the upcoming event. The Daily Operational Support Message will begin on Friday with the Water Resources Outlook this Thursday to keep everyone updated.
- These slides are intended for your use. Please feel free to share these with others. If you have any questions please email <a href="mailto:sr-alr.rivers@noaa.gov">sr-alr.rivers@noaa.gov</a> or contact your local NWS Weather Forecast Office.
- <u>Remember</u>: SERFC briefings cover freshwater flooding. For information on coastal and tidal flooding, flash floods, winds, and severe weather risks, please contact your local Weather Forecast Office.